

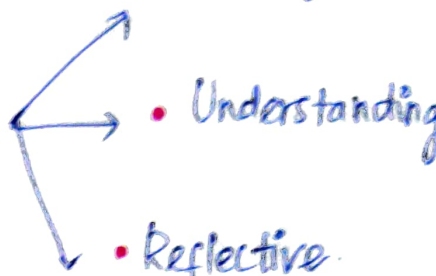
13/07/21

UNIT 1

- J. Roselin Anisha

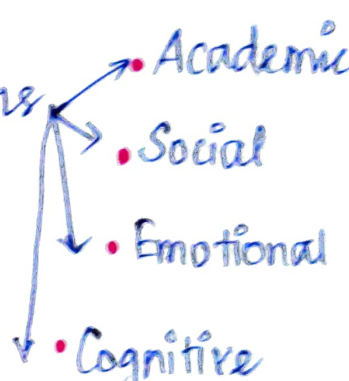
TEACHING APTITUDE.

Teaching [3 types]

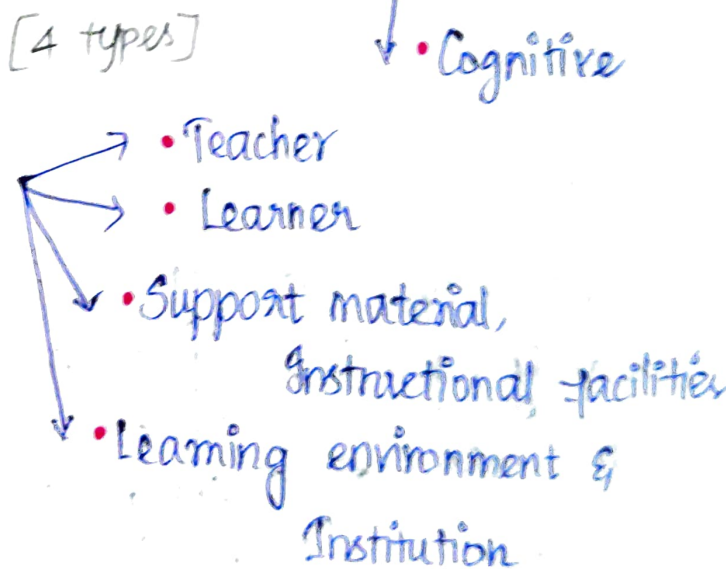
- Concept, Objective, Levels of teaching
 - Characteristics & Basic requirements
- 
- ```
graph LR; A[Teaching] --> B[Memory]; A --> C[Understanding]; A --> D[Reflective]
```

#### Learners' characteristics: [4 types]

- Characteristics of adolescent & adult learners & Individual differences.

- 
- ```
graph LR; A[Learners' characteristics] --> B[Academic]; A --> C[Social]; A --> D[Emotional]; A --> E[Cognitive]
```

Factors affecting Teaching:

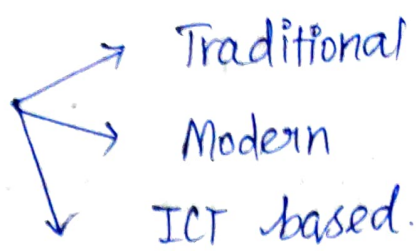
- 
- ```
graph LR; A[Factors affecting Teaching] --> B[Teacher]; A --> C[Learner]; A --> D[Support material, Instructional facilities]; A --> E[Learning environment & Institution]
```

#### Methods of teaching in Institutions of higher learning:

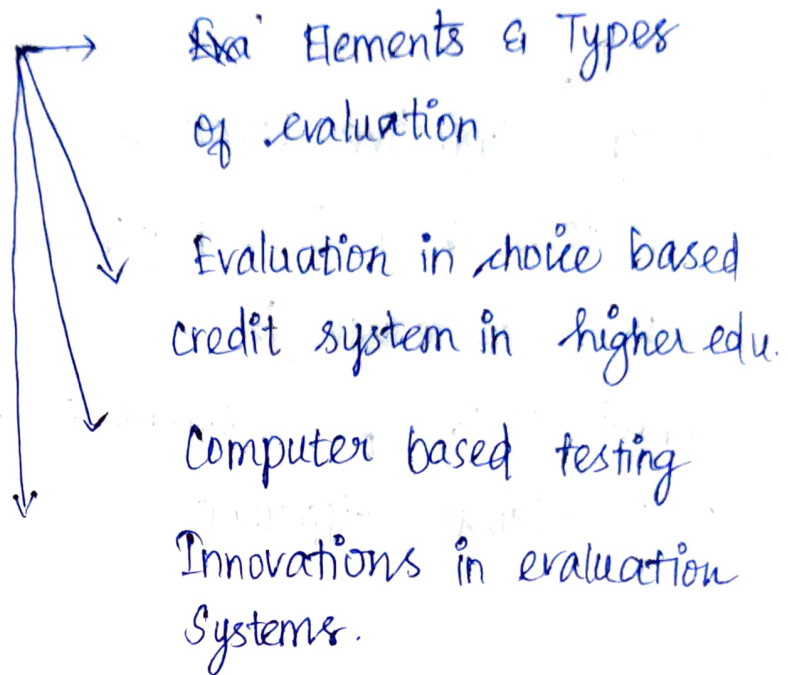
- Teacher centered Vs Learner centered
- Offline Vs Online

Current Affairs : Swayam, Swayamprabha, mooc etc.,

## Teaching Support System (3 types)



## Evaluation Systems (4 types)



## OBJECTIVES OF TEACHING :

- Acquisition of Knowledge
- Constantly refresh & upgrade Knowledge
- Student can
  - Understand
  - Apply &
  - Create
- Provide an efficient member to the society
- To make the student, a better thinker
- To acquire new experience
- Desired changes in students
- Shape behaviour & conduct.

- To ensure transformation
- To develop capacity to take decisions
- Must integrate at the end of instruction
- Improve learning skills
- Development of
  - Conceptual
  - Intellectual
  - Subject specific skills
- Formation of a belief system
- Development of values
- Objective describes → An intended results of instruction.
- Instructional obj. communicate the intended learning outcomes
- Two ways  
2 types
  - Bloom
  - Gagne & Briggs

### Bloom classification

- Cognitive domain
- Affective domain
- Psychomotor domain

### Cognitive domain:

- Related to development of intellectual capability
- Core learning
- It functions at 6 levels:



## Function at 6 levels

- i) Knowledge - Recalling Info
- 2) Comprehension - Meaning of Material
- 3) Application - Abstract to practice
- 4) Analysis - Breakdown Several Parts
- 5) Synthesis - Combining all parts
- 6) Evaluation - Judgement

## Affective domain:

• Deals with



Attitude

Motivation

Willing to participate

• Incorporating Values of discipline

## • Function at 5 levels

- i) Receiving - Listen
- ii) Responding - Reply
- iii) Valuing - Involve
- iv) Organizing - Idea
- v) Characterization - Change behaviour.



## Psychomotor domain:

- Concerned with acquisition of technical skills.

### Function at 5 diff. levels:

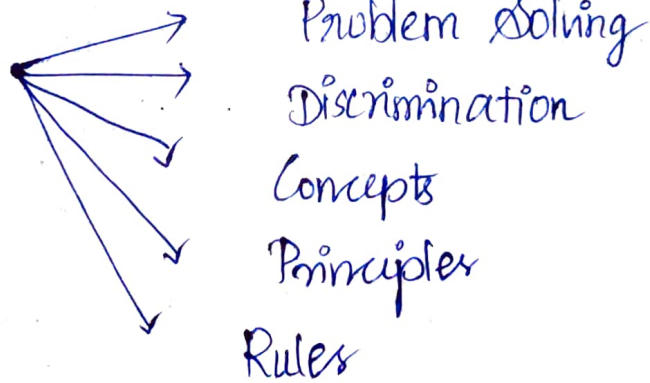
- 1) Imitation - Demo by teacher
- 2) Manipulation - Manipulating equipment by student
- 3) Precision - Accuracy increases by practice
- 4) Articulation - Achieve efficiency by practice
- 5) Naturalization - Able to adopt

## GAGNE & BRIGGS CLASSIFICATION:

- Simple to complex approach

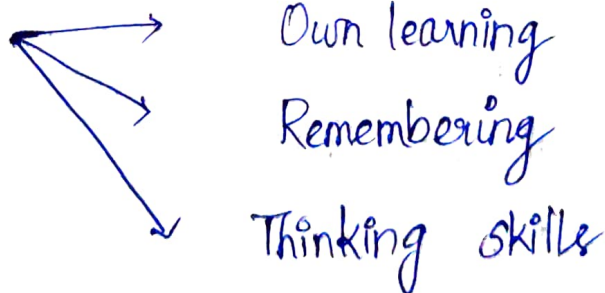
### Intellectual

(5 types)



### Cognitive

(3 types)

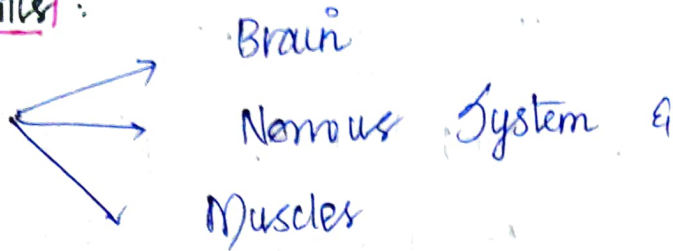


## ◦ Verbal Information:

- Refers to organized bodies of knowledge that an individual acquires

## ◦ Motor Skills:

- About  
[3 types]



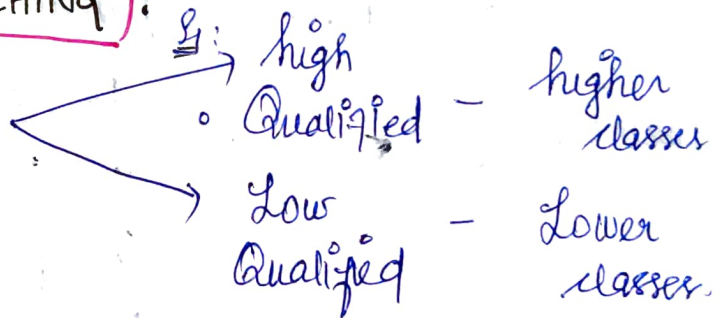
Work together → Physical Skills

## ◦ Attitudes

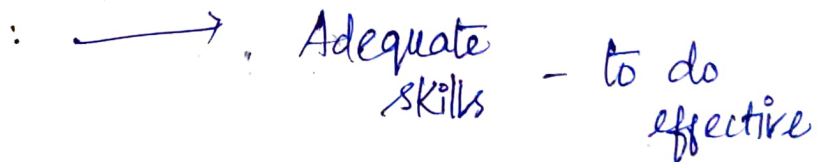
- Refers to an internal state of an individual.

## FACTORS AFFECTING TEACHING:

### 1. Educational Qualification:



### 2. Skills



### 3. Experience

- Teacher is a learner all the time
- Share his/ enhanced knowledge her
- It helps for - Handling of Student queries.

### Class room environment:

- Initiate to support teaching learning progress.

### Economic factor:

- If there is a financial problem → Teaching & learning - Affected

### Administrative policies

- Intends to bring standardization in teaching practice

### Subjective matter:

- Subject specialization - Must

### Parental Expectation:

- Intervening variable
- Put Stress on teacher & learner.

### METHODS OF TEACHING :

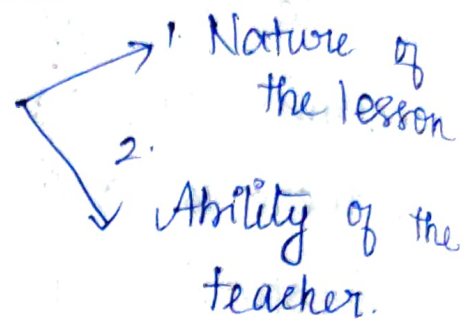
[9 types]

- Story telling
- Textbook
- Lecture
- Demonstration
- Tutorial
- Question answer
- Discussion
- Heuristic
- Discovery.



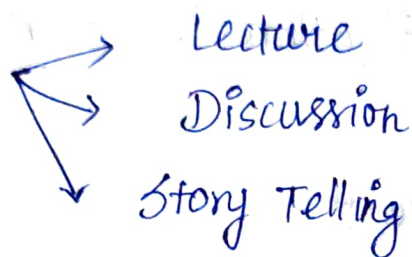
## Strategies:

- Related to the presentation of the lesson
- Adaptation of a method depends on

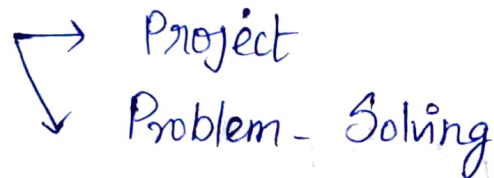


## Categories:

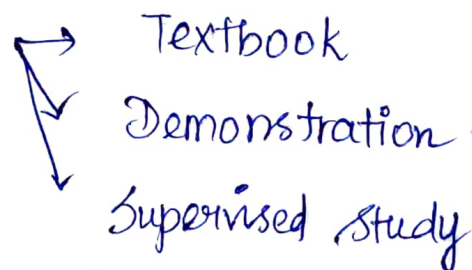
### Telling Methods:



### Activity Methods:



### Visual Methods:

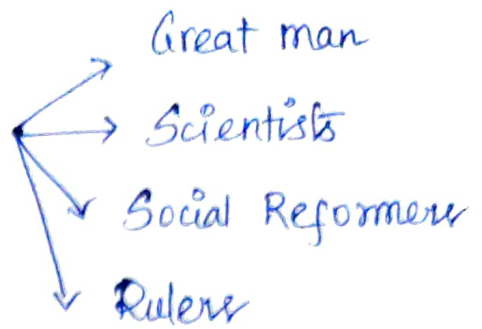


### Mental Methods:

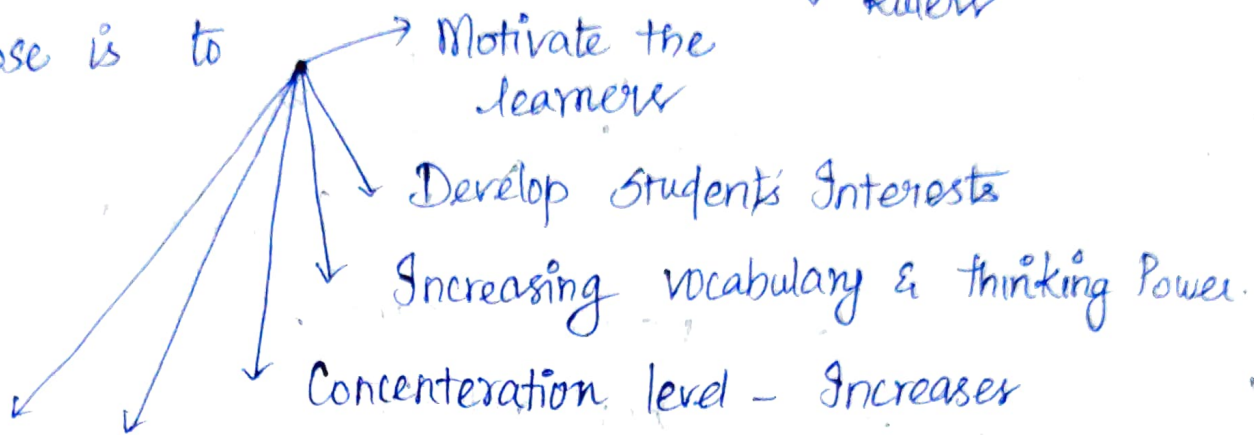


## Story Telling Methods:

- Teacher tells stories depicting light on



Purpose is to

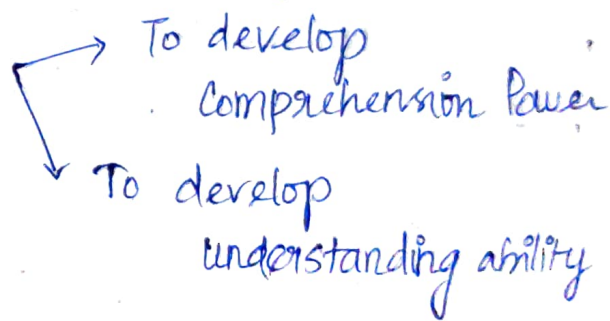


Stories - related directly / indirectly to lessons

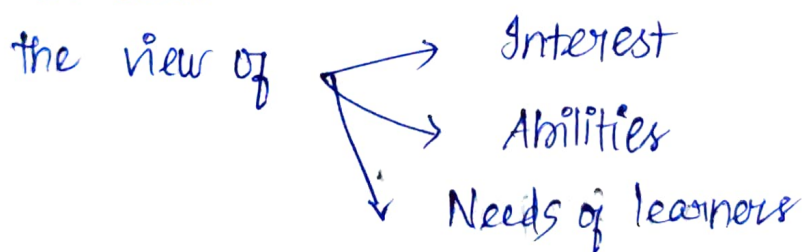
## Text Book Method:

- Teacher reads the books & explain imp things

- Learner - Reads it too loudly



- Text books are written in



## Lecture Method:

- Old & Traditional Mtd.

- Chalk & Talk Mtd

- Teacher delivers diff points of a topic without ~~help of~~ <sup>notes</sup>
- Students can ask questions

- Lecture of the Teacher
  - Logical
  - Systematic
  - Attractive
  - Clear

- Examples - given to clarify concepts.
- Easy & effective method to
  - Introduce lesson
  - Complete a lesson
- Makes the students passive learners
- Little scope for learner activity
- It is against the principle of learning by doing.
- It doesn't take into consideration individual differences
- It doesn't develop power of reasoning of the students
- It becomes monotonous to the students
- It has more limitation but still it is the most used method.

### Demonstration Method:

- If learning task is risky / complex to learn, teacher demonstrate & explains.
- Teacher demonstrates all the activities given in the lesson before
- Explains difficult points in middle through lectures



- Students get Knowledge without Experimentation.
- Useful to science subject
- Lack of opportunity for practical ability
- Learner only observe demo
- Not possible to teach all the topics

### Tutorial Method:

- Whole class is  $\div$  into homogenous small sections on the basis of abilities
- Teachers can remove difficulties by giving them ind. guidance
- Besides, group teaching is also possible here being the tutorial group homogenous.

### Question - Answer Method:

- Greek philosopher, Socrates  $\Rightarrow$  Exponent of this Method.
- He believed that knowledge existed in the spirit of humans.
- Teacher gives knowledge through questioning.
- Questioning increases curiosity of students
- Inc the comprehensive power.
- Teacher - learner  $\Rightarrow$  Both learn from it
- Natural method of learning with interaction

## Discussion Method:

- Can be formal / Informal
- Logical Arguments
- Development of leadership - Main Obj of this mtd
- Develops ability of tolerance to students
- Attitude & aptitude can be brought
- Teacher can give open ended questions
- Develops student Expression powers.

## Heuristic Method:

- Student acquire the knowledge him/herself by discovering the facts on their own.
- Problematic situation - first - Hypothesis, then - fact
- Heuristic → Armstrong → Exponent of this.
- Polition & Lanker [1945] → "Problem Solving"
- Based on "Trial & Error" Theory
- Logical & imaginative thinking → Requirements of this Strategy
- Teacher - guides them
- Suitable to inc the self confidence.

## Discovery Method:

- Diff from heuristic method.
- Used for the facts & concepts related to sub of Social Science.  
[ While heuristic method → Used to propound new laws & principles of science to verify them ].
- Facts & information → Explained here in an objective manner.
- Discovery - Related to past incidents while,
- Heurism - Related to present.

Eg:

- Discovery mtd - " Causes of Aurangzeb's failure in South India.
- Heuristic mtd - " Causes of low production of milk in Bihar "

## FACTORS AFFECTING TEACHING :

### Other Methods: (10 types)

- Role play
- Case study
- Brainstorming
- Assignment
- Team Teaching
- Simulation
- Project
- Personalized Instruction
- Diff. Instruction
- Open Learning



## Role play:

- Used by many teachers
- Used to facilitate

To help solve classroom interpersonal problems  
To teach human relations skills in classroom

↓  
Subject matter learning through dramatization of literary

- Resemblance of real life situations
- Interactive & Interesting
- Immediate feedback
- Effective to change attitude of participants
- Develop
  - Social
  - Decision Making
  - Problem Solving

## Case Study:

- Lecture → Students participation less
- Case Study → Students participation More (Active Mtd)
- Case
  - Actual situation
  - Decision making
  - Problem
  - Issues

- Students - deal with the problems described in the case.
- Leads - Innovative Solution
- Not Suitable for all subjects & situations
- Experience from real world
- Work focus from teacher - student
- Effective for learner centered education.
- Case study
  - Short brief discussion in classroom.
  - Semester level project.

### Brainstorming:

- Loosely structured form of discussing for generating ideas.
- Very useful technique for
  - Problem Solving
  - Decision making
  - Creative Thinking
  - Team building
- Develops → Listening Skills
- Students → Think without restriction

[Eg: If I were a prime minister]

- Discover new
  - Ideas
  - Thoughts &
  - Responses very quickly.
- Spontaneity → Hallmark of brainstorming.

- Works well in small groups.
- Quantity < Quality.

### Assignment:

- Written assignment helps
  - Organization of Knowledge
  - Acquiring additional Knowledge
  - Application of Knowledge
  - Better Preparation for Exams.
- Not merely from books
- Teacher should examine parameters of the assignment topic
- Should be open ended.
- Helps in both teaching & Learning.
- Students work independently
- Helps sharpening
  - Comprehension
  - Analytical
  - Problem solving abilities
  - Creativity.
- Students copy each other → -ve

### Team Teaching:


- Innovative approach in large groups
- Two or more teachers involved in
  - Planning
  - Executing
  - Evaluating
- Learning experiences of a group of students.



## Advantages:

- Optimum use of multiple teaching techniques & devices
- Improvement of teaching quality

## Limitations:

- Finding teachers with special competencies - difficult task
- Not useful for all subjects
- Requires more timing for 

## Simulation:

- Creating conditions that are similar to actual conditions
- Training provided

Eg: Training of pilots & astronauts takes place in conditions that are quite similar to actual flight conditions

- Specifically for training purpose

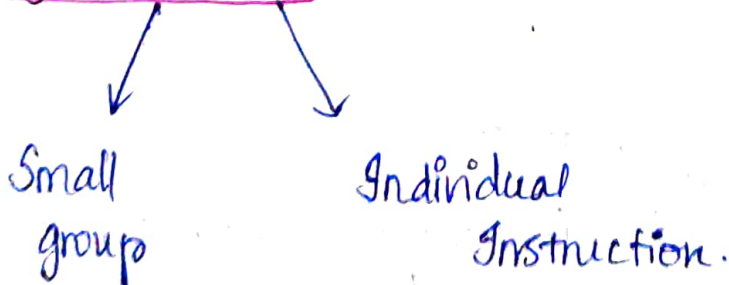
## Advantages:

- Economical in the long run
- Safety aspects taken care of

## Limitations:

- Entails high initial investment in machinery, equipment.

## Project Method:



- Students - allowed to Explore & Experience
- Experimental learning better than rote learning & memorization
- Focuses on democracy & collaboration to solve problems.


### Advantages

- Habit of critical thinking - will be improved
- Habit of team working - "

### Limitations:

- Continuous monitoring - Required
- Additional resources - Required

### Personalized System of Instructions:

- Used for all subjects
- Learner must achieve → Mastery of subject.
- Facilitator → Self paced learning  
Facilitator
- Not suited for rapidly changing course content
- Not suitable for  Psychomotor  
Affective domain

### Open Learning:

- Flexible method of delivering instruction
- Learner has - Open access to learning resources.

- Regular attendances - not necessary
- Teacher - student interaction through tutorials - form a part of open learning.
- Learning packages - developed making use of multimedia

### Differentiated Instruction:

- Dynamic & Proactive method
- Combo of
  - ↙ Whole group
  - ↘ Small group
  - ↘ Individual Instruction
- Qualitative aspect than quantitative aspect
- Uses multiple access to accomodate multiple intelligences
- Students centered.

### EVALUATION SYSTEM:

Diff b/n Assessment & Evaluation:

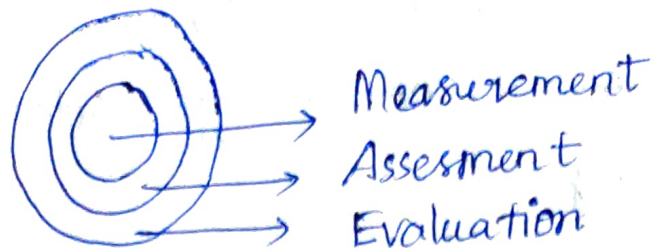
#### Assesment

- Gathering of info
- Information
- Qualitative
- Strength & Weakness
- Diagnostic, formative as well as summative.

#### Evaluation

- Act of Setting Value on assesment - info
- Judgement
- Quantitative
- Ranks
- Only summative.





## Characteristics of Evaluation System:

### Comprehensiveness:

- To assess all aspects of student development
- Used diff techniques → to evaluate performance.

### Continuous

- No fixed time limit for completion
- It is cont. process.

Eg: CBSE's [CCE]

- Identifying difficulties at regular intervals
- Remedial for that
- Enhance student performance.

## Functions of Evaluation:

### 1. Diagnosis & Feedback

- Identifying Strength & Weakness

### 2. Prediction



### 3. Motivation

### 4. Better guidance

5. Selection: Suitable person for a career.

6. Remediation: Locating area which we need remedial action.

7. Facilitates planning:

- It helps teacher in



8. Revision of curriculum

9. Inter-Institutional comparison

10. Educational decision making

11. Submission of progress & report to parents.

### Classification of Evaluation

#### Quantitative

- Written Exam
- Oral Exam
- Practical Exam

#### Qualitative

- Observation & interviews
- Checklist
- Rating Scale
- Cumulative Records.

Types of Evaluation: [7 types]

- Formative
- Summative
- Diagnostic
- Placement
- Continuous & comprehensive
- Criterion referenced
- Norm referenced

## Formative Evaluation:

- Internal Evaluation
- Focus on the process
- Ongoing feedback
- Results are immediately known to learners
- Improve the quality:- Teaching-Learning.
- Identifies specific learning error
- Students - Active Involvement
- Occurs - frequently during the course
- Integral part of Learning Process

Eg:

- |                |                         |
|----------------|-------------------------|
| ◦ Quiz         | ◦ Interviews            |
| ◦ Unit test    | ◦ Conversation          |
| ◦ Chapter test | ◦ Visual & Oral testing |
| ◦ Practical    | ◦ Assignment            |

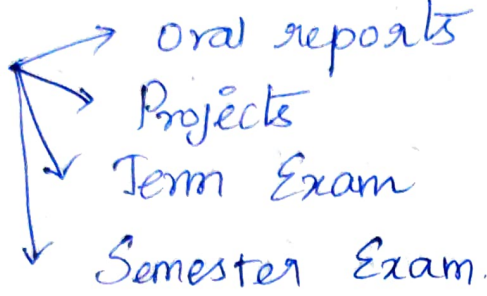
## Summative Evaluation:

- External Evaluation
- Focus on outcome
- Judging worth of the program at the end
- Total academic evaluation
- Determining the students achieved course objective.
- Most traditional assessment method.



- Assessment in the form of Paper-Pencil test mostly.
- Specific deadline.
- Shows how good or how satisfactory students completing objectives of instructions.

Eg:



```

graph LR
 Eg[Eg:] --> Oral[Oral reports]
 Eg --> Projects[Projects]
 Eg --> Term[Term Exam]
 Eg --> Semester[Semester Exam]

```

### Diagnostic Evaluation:

- Occurs at the beginning of the - Before a new unit.
- Identifies students who lack prerequisite:
  - \* Knowledge
  - \* Understanding
  - \* Skills.
- Identifies students interests.
- Provides info essential to teachers in designing
  - Appropriate programs for all students.
- More Comprehensive & detailed

Eg: Why essay is difficult & failed.

- Causes & remedies of persistent learning problems during instructions.

## Placement Evaluation :

- Designed to place → Right Person in right place.
- Determine Knowledge & Skills in beginning.
- To place students acc to prior achievement.
- The future success to the instructional process depends on the success of placement evaluation.
- To determine the level or position of the child in the instructional sequence.

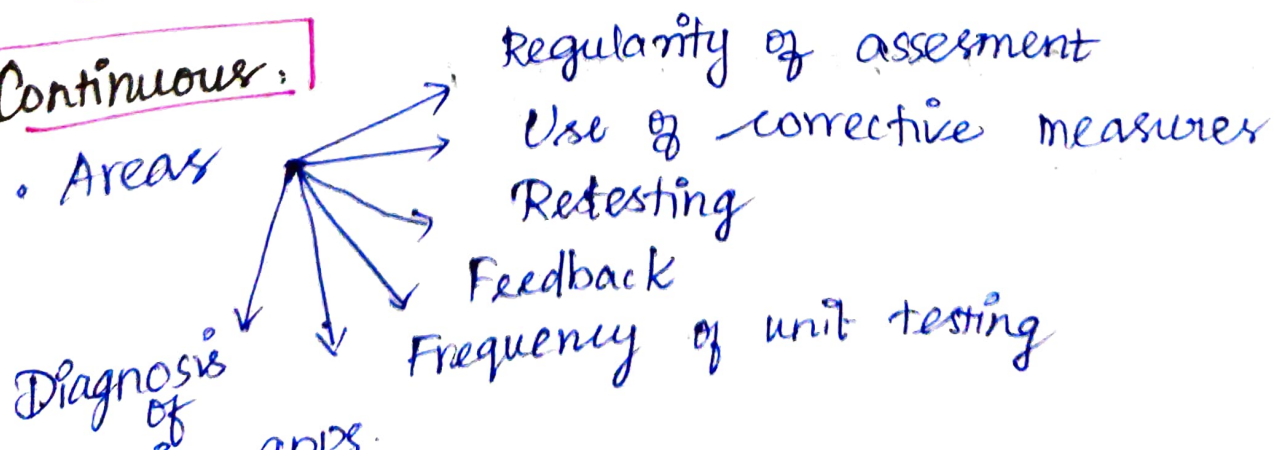
## Continuous & Comprehensive :

- Replaces marks with grades
- Evaluates every aspect of the student
- Helps in reducing examination phobia
- Through
  - Formative
  - Summative
  - Diagnostic
  - Placement

- Sometimes done at informal

## Continuous :

- Areas



## Comprehensive:

### Scholastic aspects:

- Subject specific

### Areas:

- Knowledge
- Understanding
- Evaluating
- Creating
- Analyzing
- Applying

### Criterion referenced:

- When the evaluation is concerned with the Performance of the individual terms of
  - What he/she can do (or)
  - The behaviour he/she can demonstrate
- In this evaluation there is a reference to a criterion
- There is no reference to the performance of other individuals in the group.

Criterion  
Referenced  
Evaluation

Eg:

- Rajan got 100 marks in a test of Mathematics
- A typist types 60 words per minute.

### Co-Scholastic aspects:

- Personal qualities
- Co-curricular activities
- Attitudes
- Values.